Facts & Trends
Fresh & Recycled Fiber Complementarity

Key Messages & Summary Presentation

June 2015
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Context

• Enabling and motivating consumers for **sustainable lifestyles** is one central must-have to **WBCSD’s Action2020** program

• Key to sustainable lifestyles are:
  • Efficient, responsible and transparent use of natural resources
  • Recovery & recycling
  • Reduce consumption footprints
  • Providing sustainable products

• **Forests** provide **Wood → a renewable and widely recyclable** raw material

• Imperative to **make informed choices** on wood and fiber to retain **consumer confidence** in forest-based products and **preserve natural resources**

• Publication demonstrates the **complementarity of fresh and recycled** fiber for **the sustainable supply of renewable raw material** and products
Why are fresh & recycled fiber complementary?

• Both part of a **single integrated wood fiber system**:
  – Recycled fiber would not exist if fresh fiber were not harvested,
  – Limitations to what can be recovered,
  – Losses occur during recovery and recycling processes,
  – Fiber degrades with multiple uses,
  – Fresh fiber is essential to meet some quality and product requirements.

• **50% of papermaking** fiber comes from recovered fiber

• **Fresh fiber production** will also have to **increase** to provide the amounts of fiber needed.

See section 3 and 6 of the publication for more detail.
How to maximize the societal value of each harvested tree?

• Most **eco-efficient** use of wood fiber for paper and paperboard is within a **cascading system**.
  – Fresh fiber is removed from the forest and used to make wood or paper products
  – Recovered after use, recycled fibers are reused in paper and paperboard until unsuitable for this purpose
  – At the end burned for energy, displacing fossil fuels.

See section 4 of the publication for more detail
What are the environmental trade-offs between fresh & recycled fiber? (1)

- Fresh and recycled fiber mills use different processes, resulting in different impacts:
  - Recycled fiber production can result in higher or lower releases to the environment than fresh fiber production
  - Results depend on the type of release, the product being manufactured and the fuel being used.
- Studies generally agree that recycling has lower environmental impacts than landfill disposal
- Less agreement on the environmental benefits of recycling compared to burning for energy
- In an efficient cascading system, where recyclable fibers are diverted from disposal, burning for energy would not act as an alternative to recycling, but as an eco-efficient means of gaining value from fibers that have no higher-value use.

See section 5 and 6 of the publication for more detail
What are the environmental trade-offs between fresh & recycled fiber? (2)

- Fresh and recycled fibers are part of a **single complex system**
- Comparisons between fresh and recycled fibers are very difficult and heavily influenced by decisions on **how to split the single integrated system** into separate systems
- Positive impacts and **effectiveness** of recycling depend on **how much** usable fiber can be **recovered**
- **Reduced demand for wood** & fresh fiber can increase the chance that **forests** will be permanently **converted to other land uses**

See section 5 and 6 of the publication for more detail
What does the future of fresh & recycled fiber look like? (1)

• **Recovery** of paper & paperboard is approaching the maximum that can be achieved in developed countries:
  – Europe & United States: 70%
  – Japan: 80%

• Utilization rates for newsprint and case materials exceed 90% in Europe.

• Further increases in the use of recovered fiber will require more to be used in grades that have quality requirements that can be difficult to meet with recovered fiber.
What does the future of fresh & recycled fiber look like? (2)

• Declining production of some grades of paper means that the amounts of recovered fiber obtained from these grades will also decline.

• The use of recovered fiber is only one of many factors to consider in a sustainable procurement program.

• Visit www.sustainableforestproducts.org for more information
WBCSD’s Forest Solutions Group

The WBCSD Forest Solutions Group’s (FSG) joins together global companies representing about 35% of forest, paper and packaging sales worldwide. The FSG is a global platform for strategic collaboration among value chain partners. It aims to bring more of the world’s forests under sustainable management and expand markets for responsible forest products.

For more information, visit: www.wbcsd.org

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